

## ABSTRACT

The present invention is intended to enable even a scanning-type actuator using an elastic body such as a leaf spring to easily detect a scan angle with high accuracy.

- 5 To do so, the scanning-type actuator includes an undeformable moving portion (3) provided on a tip end of a leaf spring (2) connected to a fixed portion (1), two-phase photo-sensors (SR, SL) provided on both ends of the moving portion (3), respectively, encoder slit plates (4R, 4L)
- 10 provided in lower portions of the respective two-phase photo-sensors (SR, SL) and including slits (4), an origin sensor (SC), and a processing unit (13) that calculates an angle of the moving portion (3) based on detection values of the two-phase photo-sensors (SR, SL), count values (nA,
- 15 nB) obtained by resetting the origin sensor (SC), and a distance (L) between the two-phase photo-sensors (SR, SL).